

Tropical Cyclone *Quick Reference Guide*



U.S. Navy Atlantic Tropical Web Site: <https://www.nlmoc.navy.mil>

Maritime Operations Watch Floor: 757.444.7750

DSN 564-7750

Naval Meteorology and Oceanography Center - Norfolk, 9141 Third Ave, Norfolk VA 23511-2394 email: cdo@nlmoc.navy.mil

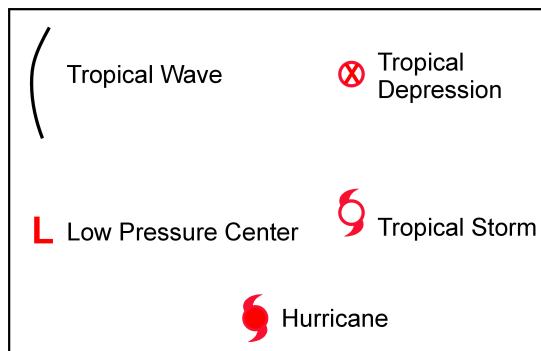
Atlantic Tropical Cyclone Season: 01 June - 30 November **East Pacific** Tropical Cyclone Season: 15 May - 30 November

2006 Atlantic Tropical Cyclone Names

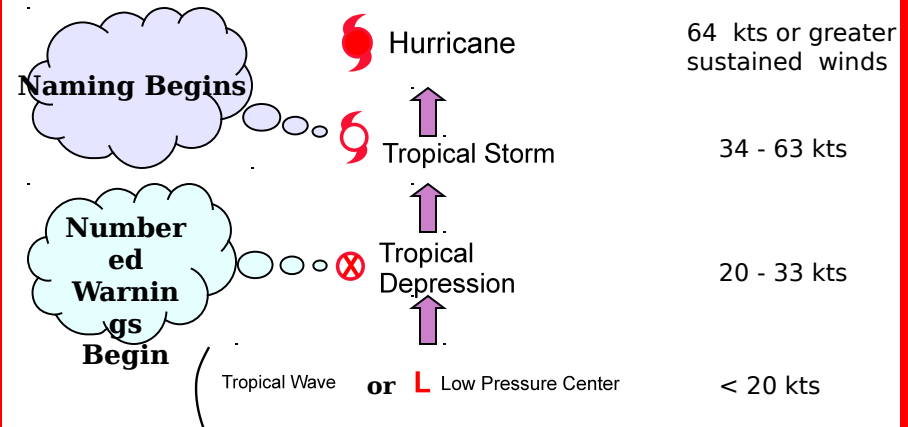
Alberto
Beryl
Chris
Debby
Ernesto
Florence
Gordon
Helene
Isaac
Joyce
Kirk

Leslie
Michael
Nadine
Oscar
Patty
Rafael
Sandy
Tony
Valerie
William

Tropical Cyclone Symbols



Stages of Tropical Cyclone Development

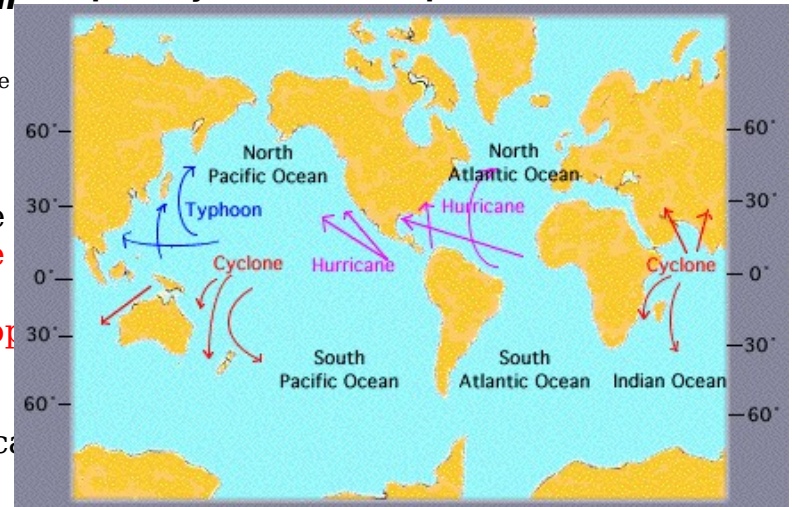


Saffir-Simpson Scale - Hurricane Destruction Potential

Category	Sustained Wind Speed		Storm Surge		Damage
	(knots)	(mph)	(ft)		
1	64 - 82	74 - 95	4 - 5		Minimal
2	83 - 95	96 - 110	6 - 8		Moderate
3	96 - 113	111 - 130	9 - 12		Extensive
4	114 - 135	131 - 155	13 - 18		Extreme
5	> 135	> 155	> 18		Catastrophic

NOTE: Category 3, 4, & 5 are considered **MAJOR** hurricanes

Tropical Cyclones: Development Areas and Movement





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Tropical Cyclone Conditions of Readiness (COR) (time to onset of destructive winds*)	Sortie Conditions	Aircraft Evacuation Status Reports (required at the following times)
COR V 96 hours COR IV 72 hours COR III 48 hours COR II 24 hours COR I 12 hours	Charlie - Prepare to sortie within 48 hours Bravo - Expected sortie within 24 hours Alpha - Commence sortie to sea	72 hours 48 hours 24 hours 12 hours

*Destructive winds are defined for each base. **Hampton Roads** defines destructive winds as **50 kts or greater**

Environmental

Requirements for Tropical

- **Sea Surface Temperature** > 26 C/78 F with sufficient depth (approx 200ft) of warm water
- **Pre-existing disturbance** to trigger thunderstorm activity (frontal boundary, easterly wave, distal low pressure, etc...)
- **Divergence** at the Upper Levels (above the 400 mb level)
- Ample Planetary Vorticity (**Coriolis Force**) [disturbance located above 8 degrees North Latitude or below 8 degrees South Latitude)
- **Weak (< 20kts) vertical wind shear** between the surface and upper troposphere
- Relatively **moist layers** at the

KEY TO TROPICAL CYCLONE WARNING GRAPHICS

The blue dashed line on the graphic indicates the **Ship Avoidance Area** associated with a storm. While the hurricane track connecting the forecast points is a useful tool, it is important to remember the uncertainty associated with a tropical cyclone track. The Ship Avoidance Area gives a projection of potential storm progress from the warning valid time for the next 24

The black and red lines on the graphic indicate the projected tropical cyclone track. The black lines indicate the **34 knot, 50 knot, and 64 knot wind radii** associated with the storm at a given point. The outermost black line indicates the 34 knot radius, the red line indicates the 50 knot radius, and the inner black line shows the 64 knot radius. Since not all cyclones have the highest winds associated with them, weaker storms will not have a 64-knot radius (and possibly no 50-knot radius also.) The actual number of miles for the radius in each quadrant is listed in the associated Tropical Cyclone

